

Description

The Triac® TVC5 Solenoids are designed to mount directly to the Triac® pneumatic actuators which eliminates tubing and fittings. The Triac® TVC5 Solenoid is field-convertible from a 3-way to a 4-way by simply relocating a port plug. All Triac® TVC5 Solenoids are leakfree and bubbletight.



Material

Part Description	Material
Valve Body & Plunger	Anodized Aluminum
Actuating Caps – Solenoid	Anodized Aluminum
Actuating Caps – Spring Cap	Synthetic Resin
Plunger & Body Seals	FKM (Fluorocarbon)
Pilot Piston Seals	NBR (Nitrile)
Actuator mounting O-Rings	NBR (Nitrile)
Pilot Piston	Synthetic Resin
Screws	Plated Steel
Port Plug	Brass

Porting Size

Inlet & Exhaust = 1/4" NPT

Flow Rates

Cv = 0.75 (Kv = 11) 48 SCFM @ 100 PSI

Ambient Temp

5 Deg F to 125 Deg F (Higher available – consult factory)

(For temperatures below 32 Deg F, Air must be free of water vapor)

Pressure – 15 PSI Minimum / 115 PSI Maximum

Media - Dry or lubricated non-corrosive gas compatible with nitrile seals.

Part Numbers & Coil Data





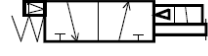
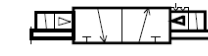


Operator Type	AC Voltage	Inrush amps	Holding amps	ohms	Nominal Power	Operator Type	DC Voltage	Inrush & Holding amps	ohm	Nominal Power
TVC5-xxxx-4N-C-A24	24VAC / 60HZ	0.63	0.49	26	8.5 Watt	TVC5-xxxx-4N-C-D12	12VDC	0.87	14	10.5 Watt
TVC5-xxxx-4N-C-E110 TVC5-xxxx-4N-C-A120	110VAC / 50HZ 120VAC / 60HZ	0.13	0.098	647	8.5 Watt	TVC5-xxxx-4N-C-D24	24VDC	0.43	55	10.5 Watt
TVC5-xxxx-4N-C-E220 TVC5-xxxx-4N-C-A240	220VAC / 50HZ 240VAC / 60HZ	0.06	0.05	2790	8.5 Watt	TVC5-xxxx-4N-C-D48	48VDC	0.22	222	10.5 Watt
TVC5-xxxx-7N-C-A24	24VAC / 60HZ	0.63	0.60	19	5.6 Watt	TVC5-xxxx-7N-C-D12	12VDC	0.63	19	7.2 Watt
TVC5-xxxx-7N-C-E110 TVC5-xxxx-7N-C-A120	110VAC / 50HZ 120VAC / 60HZ	0.127	0.12	475	5.6 Watt	TVC5-xxxx-7N-C-D24	24VDC	0.32	75	7.2 Watt
TVC5-xxxx-7N-C-E220 TVC5-xxxx-7N-C-A240	220VAC / 50HZ 240VAC / 60HZ	0.06	0.06	2000	5.6 Watt	TVC5-xxxx-7N-C-D48	48VDC	0.15	311	7.2 Watt
						TVC5-xxxx-7N-D125	125VDC	0.062	2030	7.2 Watt

4N - Watertight, NEMA 4,

7N – Flameproof, NEMA 7 & 9, UL Listed & CSA Approved

-A240 coils can operate on 24VAC/60Hz, 215VAC/50Hz or 120VDC

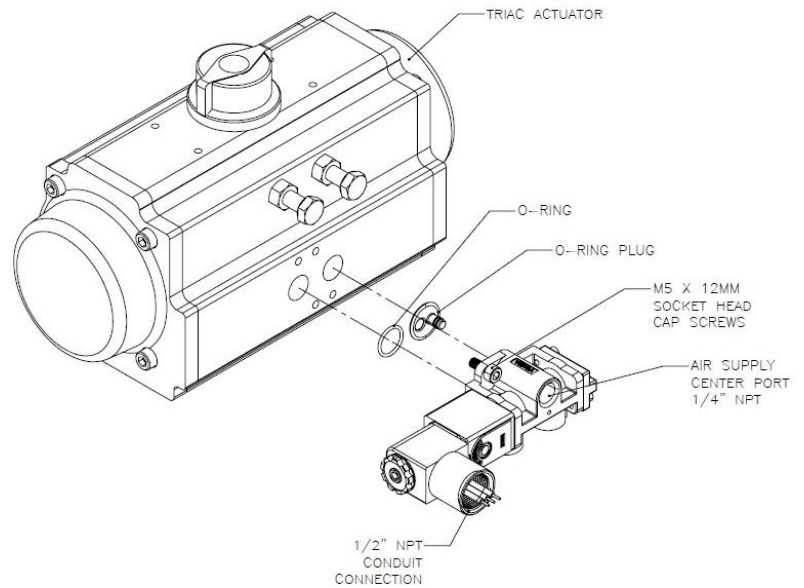
Flow Pattern Schematics

FUNCTION	PORT SIZE	Cv (Kv)	SINGLE SOLENOID/SPRING RETURN, 2 POSITION	DOUBLE SOLENOID/DETENT, 2 POSITION	DOUBLE SOLENOID/SPRING CENTERED, 3 POSITION	
					Blocked Center	Exhaust Ports Open
4-way	1/4 NPT	.75 (1 1)	TVC5-X411 - (coil code)	TVC5-X421 - (coil code)	TVC5-3421 - (coil code)	TVC5-3422 - (coil code)
5/2 & 5/3		.75 (1 1)				
3-way**	1/4 NPT	.75 (1 1)	TVC5-X411 - (coil code)	TVC5-X421 - (coil code)	TVC5-3421 - (coil code)	TVC5-3422 - (coil code)
3/2 & 3/3		.75 (1 1)				

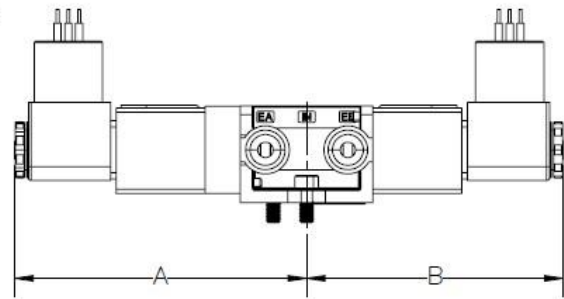
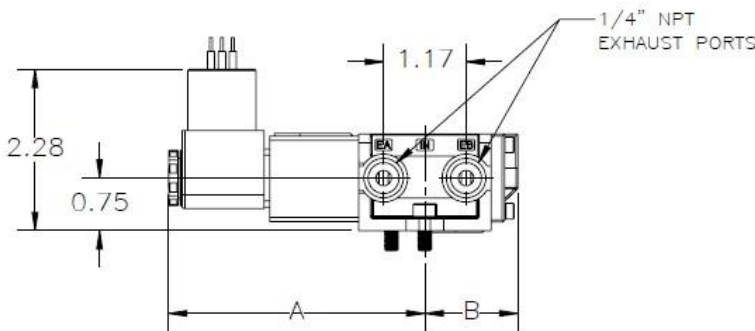
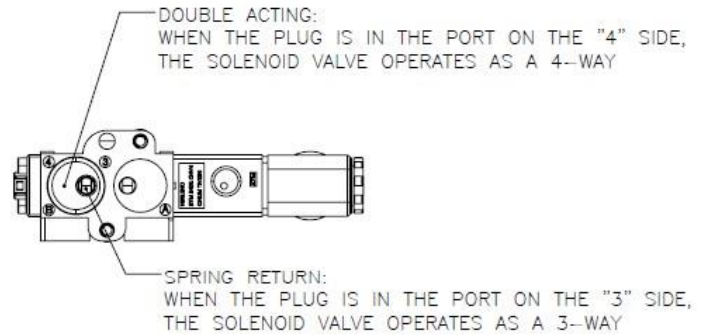
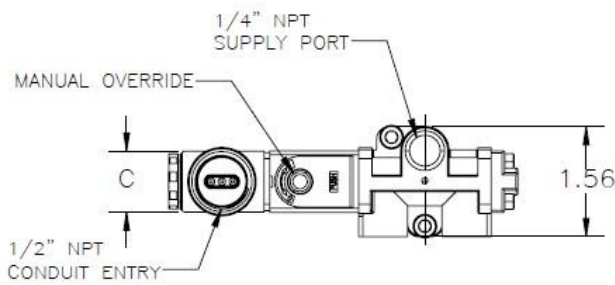
** 3-way is the same as 4-way, but is provided with a relocated cylinder port plug.

Installation Instructions

1. Place the O-rings provided into the O-ring bores on the face of the solenoid valve. Each O-ring should be completely seated in the bore.
2. Place the actuator with the two ports facing you, and the stem pointing up. Orient the TVC5 Solenoid Valve with the (2) O-rings toward the actuator and the operator towards the left.
3. The solenoid valve is then mounted to the actuator with the two screws provided.
4. Connect the air supply to the center port and wire solenoid per local and national electrical codes. The assembly is now ready for operation.
5. Optional bronze vents or adjustable speed controls can be added to the exhaust ports.



Dimensions



Coil Options

Valve Type	- N4			- N7		
	A	B	C	A	B	C
TVC5-X411	3.63	1.32	0.89	3.84	1.32	1.45
TVC5-X421 TVC5-3421	4.13	3.63	0.89	4.21	3.84	1.45

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For product specifications go to <http://download.a-tcontrols.com/>

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